NAMAN YESHWANTH KUMAR

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EDUCATION

Master of Science **Expected: May 2026**
Arizona State University - Computer Eng (GPA 3.8/4.0) **Tempe, AZ**
- Relevant course work: VLSI, Foundations of Algorithms, Reinforcement Learning in Robotics, Artificial Intelligence, Perception in Robotics, Hardware Co-design, SoC Design, Advanced Computer Architecture

Nanodegree - Self-Driving Car Engineer **February 2023**
Udacity
- Key Areas: Machine Learning, Sensor Fusion, Computer Vision, Path Planning, and Control, with hands-on projects in object detection, trajectory tracking, and autonomous vehicle motion

Bachelor of Engineering **June 2022**
BMS College of Engineering - Electrical and Electronics Eng **Bengaluru, India**

TECHNICAL SKILLS

AI and Machine Learning: Machine Learning | TensorFlow | PyTorch | Data Analytics | Computer Vision | Reinforcement Learning | Statistical Modeling
Programming Languages: Python | C++ | MATLAB | JavaScript | SQL | Shell Script | R
Development Tools: Docker | Git | AWS | Simulink | CoppeliaSim | Plotly | ROS | ROS 2
Hardware and Systems: Arduino | Raspberry Pi | ARM | SystemVerilog | Synopsys Design Compiler | Cadence Tools

WORK EXPERIENCE

Software Developer **October 2022 - April 2024**
NCR GOLD **Bengaluru, India**
- Designed and deployed a custom ordering platform (Django) with automated workflows to streamline inventory and billing for a wholesale jewelry business; processed 10,000+ orders to improve efficiency.
- Containerized applications using Docker and integrated AWS cloud deployment, implementing scalable performance optimization and seamless updates.

Research Intern **October 2021 - August 2022**
Indian Institute of Science **Bengaluru, India**
- Led the Propulsion Circuit Team, optimizing a 1.5kW axial flux BLDC motor with Ansys Maxwell; boosted efficiency and responsiveness by upgrading material and coil designs and implementing a new FOC system.
- Conducted research and experiments on optimization algorithms for speed control and battery management systems in eVTOL aircraft using Simulink, contributing to improvements in efficiency and reliability of aircraft propulsion systems.

PROJECT EXPERIENCE

Trezzit - Full Stack Bill Splitting Application **February 2025 - Present**
- Engineered Trezzit, a full-stack expense management application implementing AI-powered expense categorization and automated bill splitting workflows using machine learning models for intelligent financial data processing.
- Managed the complete project lifecycle, acquiring and supporting an initial beta community of 120+ active users from the ASU student body.
- Currently leading the next phase of growth, focused on scaling the user base to 1,000 members on campus by leveraging iterative development and community feedback. Tech Stack: Django | React | Google Generative AI (Gemini) | Material-UI | Docker

Intel Automated Self-Checkout (Open Source Contributor) **January 2025 - February 2025**
- Developed a framework in Python to publish and analyze LiDAR sensor data for autonomous checkout systems; successfully merged contributions to the main branch after comprehensive code review.
- Leveraged Docker and CI/CD pipelines, collaborating with a distributed team to enhance sensor fusion accuracy.

Raspberry Pi Self-Driving Car **February 2022 - July 2022**
- Developed an autonomous vehicle using Raspberry Pi and Arduino, implementing multi-step decision-making algorithms for lane detection, traffic sign recognition, and seamless integration via the I2C communication protocol.
- Streamlined data collection and neural network training with a Bluetooth joystick mode in a collaborative team effort; project received the Best Project Award in the EEE Department among approximately 40 submissions.

AWARDS & HONORS

- Won the 'Best Use of AI' award at Strategy X DevHacks'25 at ASU for developing AdaptED AI, a platform leveraging Google's Gemini AI to generate personalized learning paths and resources for students.
- Secured second place in the Hack SoDA 2024 at ASU with a team of four, developing PassGen, a secure and offline Chrome Extension for generating unique passwords, during a 24-hour hackathon sponsored by Amazon.
- Ranked among the Top Ten teams in the e-Yantra national-level robotics competition organized by IIT Bombay, for designing and developing a self-balancing dairy bike on CoppeliaSim, February 2022.